



RCRA ✓
P. F. Lee

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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August 28, 2006

Mr. Eric Paul
Seattle Iron & Metals Corp.
601 S. Myrtle St.
Seattle, WA 98108

CERTIFIED MAIL
7005 1820 0004 5364 0959

Dear Mr. Paul:

Re: Ecology's site visit on July 6, 2006 WAH000010678

Thank you and your staff for your time during Ecology's site visit. As we explained, Ecology is requesting a Sampling and Analysis Plan for all generators of auto shredder residue (ASR) and to fully designate the ASR for federal and state-only waste codes.

Our chemist, Alex Stone, reviewed your plan and I've included his comments in the enclosure. Please revise your Sampling and Analysis Plan to ensure it meets with our minimum requirements.

Ecology has concerns regarding the one ASR sample which you said recently failed for lead. Ecology's sampling protocol requires a 90% confidence level, which means additional sampling is required to fully designate the ASR. Please be advised that in the future should a sample fail, Seattle Iron & Metals shall conduct further sampling. Ecology recommends that you retain the sample material until you receive analytical results.

One concern which you will need to address is the sludge from the storm water treatment system. Prior to sending the sludge off-site for the next clean out, you will need to test it for the same metals as the ASR. If the material fails for metals then you will need to manage it as a hazardous waste. If it does not fail, then you will need to conduct a fish bioassay test to determine if it is a state-only hazardous waste.

If you have any questions please do not hesitate to contact me for any compliance issues at (360) 407-7553 or Alex Stone for any sampling plan questions at (360) 407-6344.

Sincerely,

David P. Misko

for Lisa Perle
NWRO, Ecology
Hazardous Waste and Toxics Reduction Program

cc: Dave Misko, Ecology-NWRO
Pinky Feria, Ecology-SWRO
Central Files, NWRO
RCRA Information



Ecology review of:

Auto Shredder Residue Sampling, Lab Analysis and Statistical Data Summary Plan
Prepared for Seattle Iron and Metals Corporation

General Comments:

1. There is no acknowledgement of requirements to address Washington state-only dangerous waste regulations. States that are delegated for the federal RCRA program as is Washington are required to be at least as stringent as RCRA. However the states are allowed to be more stringent than RCRA and Washington's dangerous waste regulations include a number of state-only criteria. You must evaluate your waste to determine whether it exceeds the state-only designation criteria. This document must provide a description of sampling and analyses that meet these requirements. Washington state-only designation criteria are described in WAC 173-303-100((5) and (6).
2. The SAP does not include any documentation requirements. An important aspect of any SAP is to identify how the sampling event is documented via the use of field log, notes, pictures, etc. The SAP needs to be expanded to include direction to the sampler to document the steps taken in addition to any deviations from the SAP and the reasons for the deviations. This documentation should include the time, the location, the amount of sample obtained, a description of the physical characteristics of the material, and any unusual observations.
3. The document does not indicate how you will determine if test results meet the 90% confidence interval for those samples that fail the dangerous waste criteria. Ecology's policy is that, if a test result indicates a waste exceeds a designation limit, the waste is assumed to be dangerous waste unless the test result can be proved to be either an "outlier" or not representative of the waste stream. In order to prove the sample is not representative, additional sampling would be required so the results demonstrate to a 90% confidence limit that the result is a true outlier. This information and discussion should be included in the SAP.
4. Although comments in this review are related to using this SAP on a routine basis, Ecology is interested in obtaining additional samples within a short timeframe to determine waste stream variability. Therefore, Ecology will discuss additional sampling events with you.

Specific Comments:

1. Purpose and Nature of Sampling and Analysis: This section neither references nor includes Washington dangerous waste requirements as a driver for the sampling effort. The document should indicate that a primary driver for the sampling event is that ASR has been identified as a solid waste subject to designation and must be analyzed to determine if any constituents exceed Washington's dangerous waste

requirements per WAC 173-303-090 through -110. ASR has been identified as a solid waste subject to designation and must be analyzed to determine if it exceeds Washington's dangerous waste characteristics and criteria. This section does refer to TSCA and Oregon DEQ requirements which are additional drivers. It should be indicated, however, that TSCA is primarily used for PCBs while dangerous waste requirements are primarily responsible for the other analyses. It would be appropriate to discuss both federal and state designation requirements at this point. Please re-write to expand upon the purposes for ASR sampling.

2. General Sampling Guidelines: The first paragraph indicates that "Samples are to be collected by personnel familiar with shredder operations....)." Please define the term "familiar." In addition, it is important that the sampler be knowledgeable concerning proper sampling techniques and the challenges of dealing with potentially dangerous waste. This section needs to be expanded to provide better definition and to indicate what minimum training requirements are needed.
3. General Sampling Guidelines: The third paragraph indicates that it is important to guarantee that the plant is operating normally and that "...the in-feed material should be representative of the facility's normal operation." Ecology strongly agrees on the importance of representative in-feed during ASR waste sampling, and believes that additional information should be collected prior to the sampling event. As indicated earlier, ASR is a very heterogeneous mixture. It is also dependent upon the material being processed at the time of collection. Therefore the SAP should include a requirement for the sampler to record the type of in-feed material being processed at the time of sampling and include documentation of the information in its field notes. With this information, the sampler will have documented evidence that its sample is representative of a typical in-feed operation. In addition, if any of the data indicate the ASR is a dangerous waste, this information may prove important in identifying possible in-feed materials that contribute to the problem and provide information to the facility which may prevent the problem from re-occurring. Please expand upon this section to include the requirement of documenting in-feed material descriptions during sampling.
4. Sampling: The first paragraph indicates federal sampling guidelines for stock piled material and contemporaneous sampling of ASR. It does not acknowledge, however, that there are additional sampling requirements to meet state dangerous waste requirements. Please expand to include state-only requirements.
5. Sampling: The sampling section needs to be expanded as it does not provide sufficient detail. For example, it does not explain how the samples will be collected, i.e. using a shovel or some other sampling device, whether disposable, sterile gloves will be placed over the heavier gloves and replaced during at each sampling aliquot, etc. It does not explain how the sampling event will be documented (field notes, pictures, etc.) and how any deviation will be recorded and explained. It does not include information how the integrity of the sample

will be maintained between aliquots. Ecology typically requires that samples be maintained at 4°C between collection and final delivery to the laboratory. In addition, it would be important to have a process which maintains the integrity of the sample between aliquots. For example, is a security tape placed on the 55-gallon drum between additions which certifies no contamination could occur or is it kept in a locked location which limits access? Ecology is not dictating what is done (within some limits), just indicating that additional detail needs to be added which guarantees the sample is both representative and obtained using the best sampling techniques.

6. Chain-of-custody: As a minor suggestion, it would be appropriate to indicate that all chain-of-custody procedures identified in EPA's sampling methodology, SW-846, will be followed.
7. Laboratory Quality Assurance and Quality Control: The document clearly identifies a level of QA/QC including the requirement for "...Matrix Spike, Matrix/Duplicate Matrix Spike and Laboratory Control Samples." SAP should clarify, however, whether individual aliquots will be obtained from the sample to run the Matrix Spike and Matrix/Duplicate Matrix Spike or if the laboratory batch runs will be used. If so, the differences between ASR and the laboratory batch analyses should be discussed.